Maintenance data

Dimensions and weight

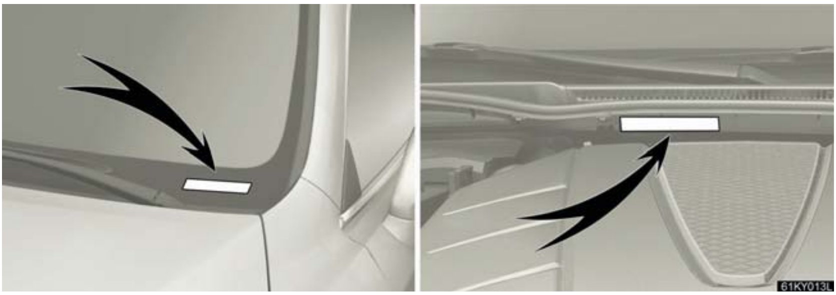
Overall length		180.1 in. (4575 mm)
Overall width		70.9 in. (1800 mm)
Overall height *1	2WD models	56.1 in. (1425 mm)
	AWD models	56.7 in. (1440 mm)
Wheelbase		107.4 in. (2730 mm)
Tread	Front	60.4 in. (1535 mm)
	Rear	60.0 in. (1525 mm)*2 60.4 in. (1535 mm)*3
Vehicle capacity weight (Occupants + luggage)		825 lb. (375 kg)

*1: Unladen vehicle
*2: Vehicle with 255/40R18 tires
*3: Vehicle with tires other than the above

Vehicle identification

n Vehicle identification number

The vehicle identification number (VIN) is the legal identifier for your vehicle. This is the primary identification number for your Lexus. It is used in registering the ownership of your vehicle.



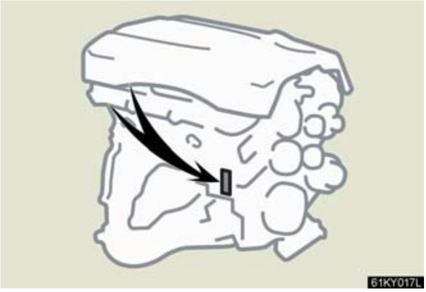
This number is stamped on the top left of the instrument panel and in the engine compartment.



This number is also on the Certification Label.

n Engine number

The engine number is stamped on the engine block as shown.



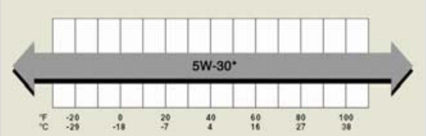
Engine

	IS250	IS350
Model	4GR-FSE	2GR-FSE
Type	6-cylinder V type, 4-cycle, gasoline	6-cylinder V type, 4-cycle, gasoline
Bore and stroke	3.27 × 3.03 in. (83.0 × 77.0 mm)	3.70 × 3.27 in. (94.0 × 83.0 mm)
Displacement	152.5 cu.in. (2500 cm^3)	210.9 cu.in. (3456 cm^3)
Drive belt tension	Automatic adjustment	

Fuel

Fuel type	Unleaded gasoline only
Octane rating	91 (Research octane number 96) or higher
Fuel tank capacity	17.2 gal. (65 L, 14.3 Imp.gal)

Lubrication system

	IS250	IS350
Oil capacity (drain and refill)		
with filter		
2WD models	6.6 qt. (6.3 L, 5.5 Imp.qt.)	6.6 qt. (6.3 L, 5.5 Imp.qt.)
AWD models	6.8 qt. (6.4 L, 5.7 Imp.qt.)	—
without filter		
2WD models	6.2 qt. (5.9 L, 5.2 Imp.qt.)	6.2 qt. (5.9 L, 5.2 Imp.qt.)
AWD models	6.3 qt. (6.0 L, 5.3 Imp.qt.)	—
Oil grade	ILSAC multi-grade engine oil	
Recommended oil viscosity	Use Lexus approved "Toyota Genuine Motor Oil" or equivalent to satisfy the above grade and viscosity.  Temperature range anticipated before next oil change	

*:5W-30 is an oil that provides optimal levels of fuel efficiency.

Oil viscosity

- The 5W portion of the oil viscosity rating indicates a characteristic of the oil which allows cold startability. Oils with a lower value before the W allow for easier starting of the engine in cold weather.
- The 30 in 5W-30 indicates the oil viscosity when the oil is at its operating temperature. An oil with a higher viscosity may be better suited if the vehicle is operated at high speeds, or under extreme load condition.

Cooling system

Capacity	9.6 qt. (9.1 L, 8.0 Imp.qt.)
Coolant type	Use either of the following. • "Toyota Super Long Life Coolant" • Similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life organic acid technology Do not use plain water alone.

Ignition system

Spark plug	
Make	
DENSO	FK20HBR11
Gap	0.043 in. (1.1 mm)

NOTICE

■ **Iridium-tipped spark plugs**

Use only iridium-tipped spark plugs. Do not adjust gap when tuning engine.

Electrical system

Battery Open voltage at 68°F (20°C):	 12.6 — 12.8 V Fully charged 12.2 — 12.4 V Half charged 11.8 — 12.0 V Discharged (Voltage checked 20 minutes after the key is removed with all the lights turned off)
Charging rates	5A max.

Differential

Oil capacity	Front	0.74 qt. (0.70 L, 0.61 Imp.qt.)
	Rear	IS350: 1.42 qt. (1.35 L, 1.19 Imp.qt.) IS250 (2WD models): 1.20 qt. (1.15 L, 1.01 Imp.qt.) IS250 (AWD models): 1.10 qt. (1.05 L, 0.92 Imp.qt.)
Oil type and viscosity	IS250 (AWD)	Hypoid gear oil API GL-5 Above 0°F (-18°C): SAE90 Below 0°F (-18°C): SAE80W or SAE80W-90
	Others	Toyota Genuine Differential Gear Oil LT 75W-85 GL-5, Toyota Genuine Differential Synthetic Gear Oil or equivalent

Automatic Transmission

	IS350	IS250 (2WD)	IS250 (AWD)
Fluid capacity Drain and refill	1.8 qt. (1.7 L, 1.5 Imp.qt.)	1.6 qt. (1.5 L, 1.4 Imp.qt.)	2.8 qt. (2.7 L, 2.4 Imp.qt.)
Fluid type	Toyota Genuine ATF WS		

NOTICE

Using automatic transmission fluid other than "Toyota Genuine ATF WS" may cause deterioration in shift quality, locking up of your transmission accompanied by vibration, and ultimately damage the automatic transmission of your vehicle.

Manual transmission

Gear oil capacity	1.9 qt. (1.8 L, 1.6 Imp.qt.)
Gear oil type	API GL-5
Recommended gear oil viscosity	SAE75W-90

NOTICE

Using manual transmission gear oil other than "TOYOTA Genuine Manual Transmission Gear Oil API GL-5" may cause occurrence of gear noise or other deterioration.

Clutch

Clutch free play	0.2—0.6 in. (5—15 mm)
Fluid type	SAE J1703 or FMVSS No.116 DOT 3

Brakes

Pedal clearance *1 IS 350 IS 250 Manual transmission Automatic transmission	 4.13 in. (105 mm) Min. 4.09 in. (104 mm) Min. 4.3 in. (108 mm) Min.
Pedal free play	0.04 — 0.08 in. (1.0 — 2.0 mm)
Brake pad wear limit	0.04 in. (1.0 mm)
Parking brake lining wear limit	0.04 in. (1.0 mm)
Parking brake pedal travel *2/ lever travel *3 Pedal type Lever type	 7 — 9 clicks 4 — 6 clicks
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3

*1: Minimum pedal clearance when depressed with a force of 50 kgf (490 N, 110 lbf) while the engine is running.

*2: Parking brake pedal travel when depressed with a force of 30.6 kgf (300 N, 67.4 lbf).

*3: Parking brake lever travel when pulled up with a force of 20.4 kgf (200 N, 50.0 lbf).

Steering

Free play	Less than 1.2 in. (30 mm)

Tires and wheels

▶ Type A

Tire size	205/55R16 89W, T125/70D17 98M (spare)
Front and rear tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front tires: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear tires: 38 psi (260 kPa, 2.6 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 5.8 psi (40 kPa, 0.4 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Spare tire inflation pressure (Recommended cold tire inflation pressure)	60 psi (420 kPa, 4.2 kgf/cm^2 or bar,)
Wheel size	16 × 7JJ, 17 × 4T (spare)
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

▶ Type B

Tire size	225/45R17 90W, 245/45R17 95W, T125/70D17 98M (spare)
Front and rear tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front tires: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear tires: 38 psi (260 kPa, 2.6 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 4.5 psi (30 kPa, 0.3 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Spare tire inflation pressure (Recommended cold tire inflation pressure)	60 psi (420 kPa, 4.2 kgf/cm^2 or bar)
Wheel size	17 × 8JJ, 17 × 4T (spare)
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

▶ Type C

Tire size	225/45R17 91V, 225/45R17 91V, T125/70D17 98M
Front and rear tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front tires: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear tires: 38 psi (260 kPa, 2.6 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 7.2 psi (50 kPa, 0.5 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Spare tire inflation pressure (Recommended cold tire inflation pressure)	60 psi (420 kPa, 4.2 kgf/cm^2 or bar)
Wheel size	17 × 8JJ, 17 × 4T (spare)
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

▶ Type D

Tire size	Front tires: 225/45R17 95V Rear tires: 245/45R17 95V Spare tire: T125/70R17 98M
Front and rear tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front tires: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear tires: 38 psi (260 kPa, 2.6 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 10 psi (70 kPa, 0.7 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Spare tire inflation pressure (Recommended cold tire inflation pressure)	60 psi (420 kPa, 4.2 kgf/cm^2 or bar)
Wheel size	17 × 8JJ, 17 × 4T (spare)
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

▶ Type E

Tire size	Front tires: 225/40R18 88Y Rear tires: 255/40R18 95Y Spare tire: T145/70R17 106M
Front and rear tire inflation pressure (Recommended cold tire inflation pressure)	Driving under normal conditions Front tires: 35 psi (240 kPa, 2.4 kgf/cm^2 or bar) Rear tires: 38 psi (260 kPa, 2.6 kgf/cm^2 or bar) Driving at high speeds above 100 mph (160 km/h) (in countries where such speeds are permitted by law) Add 7.2 psi (50 kPa, 0.5 kgf/cm^2 or bar) to the front tires and rear tires. Never exceed the maximum cold tire inflation pressure indicated on the tire sidewall.
Spare tire inflation pressure (Recommended cold tire inflation pressure)	60 psi (420 kPa, 4.2 kgf/cm^2 or bar)
Wheel size	Front wheels: 18 × 8J Rear wheels: 18 ×8 1/2J Spare wheel: 17 × 4T
Wheel nut torque	76 ft•lbf (103 N•m, 10.5 kgf•m)

Light bulbs

	Light Bulbs	Bulb No.	W	Type
Exterior	Headlights High beam Low/high* beam (discharge bulbs) Low beam* (halogen bulbs)	 9005 D4S H11	 65 35 55	 D A B
	Front turn signal lights	—	21	C
	Parking lights	168	5	E
	Front fog lights	9006	55	F
	Trunk light	—	5	G
	Rear turn signal lights	7440	21	E
	Back-up lights	921	16	E
	Outer foot lights	—	5	E
Interior	Vanity lights	—	8	E
	Interior lights Front Rear	—	 10 3.0	 E G
	Overhead courtesy lights Front Rear	—	 3.8 3.0	 E G
	Door courtesy lights	—	3.8	E

*: If equipped

A: D4S discharge bulbs

B: H11 halogen bulbs

C: Wedge base bulbs (amber)

D: HB3 halogen bulbs

E: Wedge base bulbs (clear)

F: HB4 halogen bulbs

G: Double end bulbs

Fuel information

Your vehicle must use only unleaded gasoline.
Premium unleaded gasoline with an Octane Rating of 91 (Research Octane Number 96) or higher required for optimum engine performance.

At minimum, the gasoline you use should meet the specifications of ASTM D4814 in the U.S.A. and CGSB3.5-M93 in Canada.

■ **Fuel tank opening for unleaded gasoline**

To help prevent incorrect fueling, your Lexus has a fuel tank opening that only accommodates the special nozzle on unleaded fuel pumps.

■ **If premium gasoline is not available**

If this premium fuel is not available, you may use unleaded gasoline with an Octane Rating of 87 or so (Research Octane Number 91).
IS250: The use of such gasoline will cause persistent heavy knocking. If severe, this will lead to engine damage.
IS350: The use of such gasoline may cause the engine to knock or drastically reduce output to protect itself while driving with a heavy load. To avoid this, refill the tank with premium unleaded gasoline as soon as possible.

■ **If your engine knocks**

- Consult your Lexus dealer.
- You may occasionally notice light knocking for a short time while accelerating or driving uphill. This is normal and there is no need for concern.

■ **Gasoline quality**

In very few cases, driveability problems may be caused by the brand of gasoline you are using. If driveability problems persist, try changing the brand of gasoline. If this does not correct the problem, consult your Lexus dealer.

Gasoline quality standards

- Automotive manufacturers in the US, Europe and Japan have developed a specification for fuel quality called World-Wide Fuel Charter (WWFC) that is expected to be applied worldwide.
- The WWFC consists of four categories that are based on required emission levels. In the US, category 4 has been adopted.
- The WWFC improves air quality by lowering emissions in vehicle fleets, and customer satisfaction through better performance.

Lexus recommends the use of gasoline containing detergent additives

- Lexus recommends the use of gasoline that contains detergent additives to avoid build-up of engine deposits.
- All gasoline sold in the US contains detergent additives to clean and/or keep clean intake systems.

Lexus recommends the use of cleaner burning gasoline

Cleaner burning gasoline, including reformulated gasoline that contains oxygenates such as ethanol or MTBE (Methyl Tertiary Butyl Ether) is available in many areas.

Lexus recommends the use of cleaner burning gasoline and appropriately blended reformulated gasoline. These types of gasoline provide excellent vehicle performance, reduce vehicle emissions and improve air quality.

Lexus does not recommend blended gasoline

- Lexus allows the use of oxygenate blended gasoline where the oxygenate content is up to 10% ethanol or 15% MTBE.
- If you use gasohol in your Lexus, be sure that it has an octane rating no lower than 87.
- Lexus DOES NOT recommend the use of gasoline containing methanol.

Lexus does not recommend gasoline containing MMT

Some gasoline contains octane enhancing additive called MMT (Methylcy clopentadienyl Manganese Tricarbonyl).

Lexus DOES NOT recommend the use of gasoline that contains MMT. If fuel containing MMT is used, your emission control system may be adversely affected.

The malfunction indicator lamp on the instrument cluster may come on. If this happens, contact your Lexus dealer for service.

NOTICE

- **Notice on gasoline quality**
  - Do not use leaded gasoline.
    Leaded gasoline can cause damage to your vehicle’s three-way catalytic converters causing the emission control system to malfunction.
  - Do not use gasohol other than that stated here.
    Other gasohol may cause fuel system damage or vehicle performance problems.
  - Using unleaded gasoline with an octane number or rating lower than that stated here will cause persistent heavy knocking.
    At worst, this will lead to engine damage.
- **Fuel-related poor driveability**

  If after using a different type of fuel, poor driveability is encountered (poor hot starting, vaporization, engine knocking, etc.), discontinue the use of that type of fuel.
- **When refueling with gasohol**

  Take care not to spill gasohol. It can damage your vehicle's paint.

Tire information

Typical tire symbols



1 Tire size (→P. 394)

2 DOT and Tire Identification Number (TIN) (→P. 393)

3 Location of tread wear indicators (→P. 395)

4 Tire ply composition and materials

Plies are layers of rubber-coated parallel cords. Cords are the strands which form the plies in a tire.

5 Radial tires or bias-ply tires

A radial tire has RADIAL on the sidewall. A tire not marked RADIAL is a bias-ply tire.

6 TUBELESS or TUBE TYPE

A tubeless tire does not have a tube and air is directly filled in the tire. A tube type tire has a tube inside the tire and the tube maintains the air pressure.

7 Load limit at maximum cold tire inflation pressure (→P. 397)

8 Maximum cold tire inflation pressure (→P. 397)

This means the pressure to which a tire may be inflated.

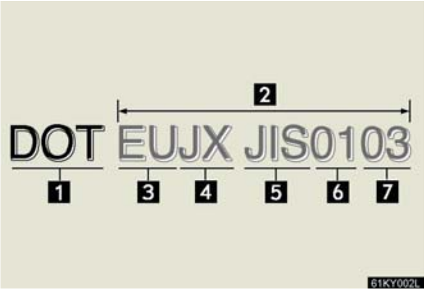
9 Uniform tire quality grading

For details, see "Uniform tire quality grading" that follows.

10 Summer tire or all season tire (→P. 395)

An all season tire has "M+S" on the sidewall. A tire not marked "M+S" is a summer tire.

Typical DOT and tire identification number (TIN)

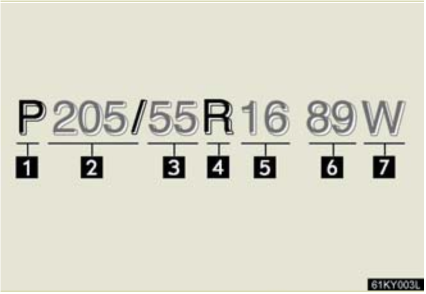


1 DOT symbol*
2 Tire Identification Number (TIN)
3 Tire manufacturer's identification mark
4 Tire size code
5 Manufacturer's optional tire type code (3 or 4 letters)
6 Manufacturing week
7 Manufacturing year

*: The DOT symbol certifies that the tire conforms to applicable Federal Motor Vehicle Safety Standards.

Tire size

Typical tire size information



The illustration indicates typical tire size.

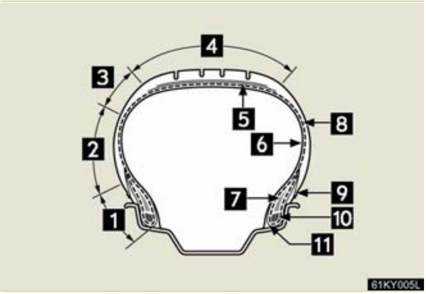
1. Tire use
   (P = Passenger car,
   T = Temporary use)
2. Section width (millimeters)
3. Aspect ratio
   (tire height to section width)
4. Tire construction code
   (R = Radial, D = Diagonal)
5. Wheel diameter (inches)
6. Load index (2 or 3 digits)
7. Speed symbol
   (alphabet with one letter)

Tire dimensions



1. Section width
2. Tire height
3. Wheel diameter

Tire section names



1 Bead
2 Sidewall
3 Shoulder
4 Tread
5 Belt
6 Inner liner
7 Reinforcing rubber
8 Carcass
9 Rim lines
10 Bead wires
11 Chafer

Uniform Tire Quality Grading

This information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S.A. Department of Transportation.
It provides the purchasers and/or prospective purchasers of Lexus vehicles with information on uniform tire quality grading.

Your Lexus dealer will help answer any questions you may have as you read this information.

DOT quality grades

All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades. Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example: Treadwear 200 Traction AA Temperature A

■ Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and a half (1 - 1/2) times as well on the government course as a tire graded 100.
The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

■ Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete.

A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

■ Temperature A, B, C

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grades for this tire are established for a tire that is properly inflated and not overloaded.
Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

Glossary of tire terminology

Tire related term	Meaning
Accessory weight	The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not)
Cold tire inflation pressure	Tire pressure when the vehicle has been parked for three hours or more, or has not been driven more than 1 mile or 1.5 km under that condition
Curb weight	The weight of a motor vehicle with standard equipment, including the maximum capacity of fuel, oil and coolant, and if so equipped, air conditioning and additional weight optional engine
Maximum inflation pressure	The maximum cold inflated pressure to which a tire may be inflated, shown on the sidewall of the tire
Maximum loaded vehicle weight	The sum of: (a) Curb weight (b) Accessory weight (c) Vehicle capacity weight (d) Production options weight
Normal occupant weight	150 lb. (68 kg) times the number of occupants specified in the second column of Table 1* that follows

Tire related term	Meaning
Production options weight	The combined weight of installed regular production options weighing over 5 lb. (2.3 kg) in excess of the standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim
Vehicle capacity weight (Total load capacity)	The rated cargo and luggage load plus 150 lb. (68 kg) times the vehicle's designated seating capacity
Intended outboard side-wall	(a) The sidewall that contains a whitewall, bears white lettering, or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other side-wall of the tire, or (b) The outward facing sidewall of asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle
Occupant distribution	Distribution of occupants in a vehicle as specified in the third column of Table 1* below
Recommended inflation pressure	Cold tire inflation pressure recommended by a manufacturer.
Rim	A metal support for a tire or a tire and tube assembly upon which the tire beads are seated
Rim diameter (Wheel diameter)	Nominal diameter of the bead seat
Rim size designation	Rim diameter and width
Rim type designation	The industry manufacturer's designation for a rim by style or code
Rim width	Nominal distance between rim flanges

Tire related term	Meaning
Vehicle maximum load on the tire	The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight, and dividing by two
Vehicle normal load on the tire	The load on an individual tire that is determined by distributing to each axle its share of curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table 1* below), and dividing it by two
Weather side	The surface area of the rim not covered by the inflated tire

*: Table 1 — Occupant loading and distribution for vehicle normal load for various designated seating capacities

Designated seating capacity, Number of occupants	Vehicle normal load, Number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat